

Year 4 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2021-June 30, 2022

Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2021 and June 30, 2022 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization:

EPA NPDES Permit Number:

Primary MS4 Program Manager Contact Information

Name:

Title:

Street Address Line 1:

Street Address Line 2:

City:

State:

Zip Code:

Email:

Phone Number:

Stormwater Management Program (SWMP) Information

SWMP Location (web address):

Date SWMP was Last Updated:

If the SWMP is not available on the web please provide the physical address:

Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here: <https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state>

Impairment(s)			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input checked="" type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input checked="" type="checkbox"/> Phosphorus
<input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
TMDL(s)			
<i>In State:</i>	<input type="checkbox"/> Assabet River Phosphorus	<input checked="" type="checkbox"/> Bacteria and Pathogen	<input type="checkbox"/> Cape Cod Nitrogen
	<input type="checkbox"/> Charles River Watershed Phosphorus	<input type="checkbox"/> Lake and Pond Phosphorus	
<i>Out of State:</i>	<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Metals	<input type="checkbox"/> Nitrogen
			<input type="checkbox"/> Phosphorus
			Clear Impairments and TMDLs

Next, check off all requirements below that have been completed. **By checking each box you are certifying that you have completed that permit requirement fully.** If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

Year 4 Requirements

Developed a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover, made it available as part of the SWMP, and:

No updates were recommended

Updates were recommended. The anticipated date or date of completion for updates is/was:

To be determined pending discussions with other departments. Estimated June 30, 2027.

Developed a report assessing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP, and:

No updates were recommended

Updates were recommended. The anticipated date or date of completion for updates is/was:

To be determined pending discussions with other departments. Estimated June 30, 2027.

Identified a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious cover

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide an update on previous incomplete milestones, or provide any additional details, please use the box below:

Members of the Greenscapes North Shore Coalition reviewed all municipal regulations related to impervious cover creation. The Greenscapes team used the MA Audubon bylaw review tool to evaluate all of the regulations in the context of green infrastructure feasibility and compiled a detailed report of their findings, which also includes recommended improvements for each regulation reviewed. The full report and community

specific recommendations can be found here:https://greenscapes.org/wp-content/uploads/2022/08/MS4-Grant-Report-FINAL_reduced.pdf

In connection with the bylaw review efforts conducted by the Greenscapes Coalition, two educational webinars were also conducted. The first webinar was held at the onset of the review process and introduced the project scope while detailing the value of encouraging LID practices in municipal codes. This webinar yielded 70 attendees. The second webinar, held following the completion of the review process, was hosted by EPA's Soak Up the Rain and discussed the project results and lessons learned. This webinar had approximately 300 attendees.

Annual Requirements

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- Kept records relating to the permit available for 5 years and made available to the public
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
 - This is not applicable because we do not have sanitary sewer
 - This is not applicable because we did not find any new SSOs
 - The updated SSO inventory is attached to the email submission
 - The updated SSO inventory can be found at the following website:

- Updated system map due in year 2 as necessary
- Provided training to employees involved in IDDE program within the reporting period
- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- All curbed roadways were swept at least once within the reporting period
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Updated inventory of all permittee owned facilities as necessary
- O&M programs for all permittee owned facilities have been completed and updated as necessary
- Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Inspected all permittee owned treatment structures (excluding catch basins)

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Chloride

- Completed the Salt Reduction Plan due in Year 3, updated if necessary
 - The Salt Reduction Plan is attached to the email submission
 - The Salt Reduction Plan can be found at the following website:

<https://andoverma.gov/306/Stormwater-Management>

Annual Requirements

Public Education and Outreach

- Included an annual message in November/ December to private road salt applicators and commercial industrial site owners on the proper storage and application rates of winter deicing material, along with the steps that can be taken to minimize salt use and protect local waterbodies

Please fill out the following information on salt usage over Year 4 of the permit. Be sure to include units for amount of salt:

Type(s) of salt applied: Rock salt

7,913 tons

Amount of salt applied: Note: Due to equipment breakdown, some snow and ice events were not tracked via the system. Estimates range from 140-170 tons of salt per treatment event.

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

- Distributed an annual message in the spring (April/May) encouraging the proper use and disposal of grass clippings and encouraging the proper use of slow-release and phosphorus-free fertilizers
- Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

Phosphorus Source Identification Report

- Completed the Phosphorus Source Identification Report
 - The Phosphorus Source Identification Report is attached to the email submission
 - The Phosphorus Source Identification Report can be found at the following website:

<https://andoverma.gov/306/Stormwater-Management>

Potential structural BMPs

Any structural BMPs already existing or installed in the regulated area by the permittee or its agents was tracked and the phosphorus removal by the BMP was estimated consistent with Attachment 3 to Appendix F. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP were documented.

- The BMP information is attached to the email submission
- The BMP information can be found at the following website:

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Street Sweeping - Every road is swept at least twice per year. Main Street Business District is swept at least 3 times per week.

Potential structural BMPs - The Town has been working on updating its inventory and map of Town-owned and private BMPs. Phosphorus loads and removals from existing BMPs have not yet been calculated. These estimates will be performed in conjunction with the update of the Phosphorus Source Identification Plan in Year 5.

Solids, Oil and Grease (Hydrocarbons), or Metals

Annual Requirements

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads

The street sweeping schedule is attached to the email submission

The street sweeping schedule can be found at the following website:

<https://andoverma.gov/306/Stormwater-Management>
The sweeping schedule is included in the appendix of the SWMP.

Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more than 50

percent full; Cleaned catch basins more frequently if inspection and maintenance activities indicated excessive sediment or debris loadings

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Street Sweeping - Every road is swept at least twice per year. Main Street Business District is swept at least 3 times per week. Turbidity impaired watersheds were not observed to accumulate more sediment and debris than other areas within the Town, therefore the current sweeping schedule is deemed adequate.

Catch Basin Cleaning - The Town uses a field app to track catch basins as they are cleaned. Based on these cleaning records, the Town has identified and prioritized several catch basins for more frequent cleaning, which it implements as part of its program.

Optional: Use the box below to provide any additional information you would like to share as part of your self-assessment:

[Empty text box for self-assessment]

Part III: Receiving Waters/Impaired Waters/TMDL

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

- Yes
 No

If yes, describe below, including any relevant impairments or TMDLs:

Changes to Impairments or TMDLs since NOI:

- Merrimack River (MA84A-03): impairment for Fish Passage Barrier* added in 2018/2020.
- Rogers Brook (MA83-04): TMDL for E. Coli added in 2016; impairment for Turbidity removed in 2016.
- Shawsheen River (MA83-18): TMDL for E. Coli added in 2016; impairment for Mercury in Fish Tissue removed in 2016.
- Shawsheen River (MA83-19): TMDL for E. Coli added in 2016; impairment for Dissolved Oxygen removed in 2016
- Unnamed Tributary (MA83-15): TMDL for E. Coli and impairment for Dewatering* added in 2016.

*Impairments that do not require a TMDL

An updated list of outfalls and receiving waters is maintained on the Town's online ArcGIS map and database and included in periodic updates of the Town's IDDE Plan.

Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

MCM1: Public Education

Number of educational messages completed during this reporting period: 12

Below, report on the educational messages completed during this reporting period. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.

BMP: Elementary School Program - Keeping Water Clean

Message Description and Distribution Method:

Two-day program at Andover's West Elementary School. Program engages 5th grade students in several activities designed to raise their stormwater and water conservation awareness. Students learn about what a watershed is, what stormwater, groundwater and wastewater are, how they can negatively or positively impact these water systems, along with more details about each system and how it should be protected/maintained.

The Greenscapes Guide, a 26 page magazine that covers sustainable landscaping tips, DIY stormwater management for homeowners and more, was distributed at the school program.

Targeted Audience: Residents

Responsible Department/Parties: Greenscapes Coalition

Measurable Goal(s):

88 students in Andover
10 teachers and parents in Andover
3,000 guides distributed throughout the North Shore

Message Date(s): September 2021 - June 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Video - "Fowl Water"

Message Description and Distribution Method:

The Think Blue Massachusetts "Fowl Water" video defines stormwater and explains the impact that pollution like trash, oil, cigarettes and dog poop can have on stormwater and our waterways. Video available at <https://www.thinkbluemassachusetts.org/> , www.greenscapes.org/resources-videos/ and spread as an advertisement on Facebook, Instagram, & YouTube

Targeted Audience: Residents

Responsible Department/Parties: Think Blue MA, Greenscapes Coalition

Measurable Goal(s):

18,296 impressions on Facebook/Instagram
27,557 impressions on YouTube

Message Date(s): May 31, 2022 - June 17th, 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Workshop - Planning Tools to Promote Natural Resource Stewardship

Message Description and Distribution Method:

Hosted by members of the PIE-Rivers Partnership, this free virtual workshop discussed the latest trends in promoting LID and other forms of Green Infrastructure in North Shore communities.

Targeted Audience: Residents

Responsible Department/Parties: PIE Rivers Partnership, Greenscapes Coalition

Measurable Goal(s):

82 Participants

Message Date(s): November 9, 2021

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Greenscapes Materials & Social Media Pages

Message Description and Distribution Method:

The Greenscapes storm drain rack card, originally printed in 2016 was modified for easy office printing and distribution. The original can be found here: <https://greenscapes.org/wp-content/uploads/2017/01/Greenscapes-Rack-Card-2014-final.pdf>. The Greenscapes Coalition also has a number materials directed towards residential, commercial, industrial and developer audiences.

Social media content related to stormwater management, wastewater and groundwater protection, water conservation, pet waste, septic system maintenance and sustainable lawn care are always available on the Greenscapes social media pages and on the Greenscapes website. <https://greenscapes.org/resources-socialmedia/>

Andover is a member of the Greenscapes North Shore Coalition and provides a link to the Greenscapes website on the Town website. The Town also provides direct links to several specific Greenscapes materials, including "Greenscapes - About Stormwater", "Greenscapes - Guide to Landscaping", "Greenscapes Rain Garden Brochure", "Greenscapes - Scoop the Poop", "Greenscapes - What goes in the drain", "Greenscapes Industrial Brochure".

Targeted Audience: Residents, Businesses, Industrial, Developers

Responsible Department/Parties: Greenscapes Coalition, Municipal Staff

Measurable Goal(s):

Continuous access to various stormwater materials.

Message Date(s): Continuously available online

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Public Lecture - Coastal Communities Talk Water

Message Description and Distribution Method:

This free community event at the Cabot Theater in Beverly MA, featured guest speakers from Salem Sound Coastwatch, the Ipswich River Watershed Association, Green Beverly, Sustainable Marblehead and the EPA, who covered various topics related to water quality, water quantity and general watershed stewardship. Printed materials were also being passed out by Greenscapes personnel.

Targeted Audience: Residents

Responsible Department/Parties: Greenscapes Coalition

Measurable Goal(s):

150 Attendees

Message Date(s): March 10th, 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Yard Waste

Message Description and Distribution Method:

Recycling and Trash Guide posted on website, available for pickup at Library, Water Treatment Plant, Town Offices and the Municipal Services Building, and mailed upon request. The Recycle Guide is also handed out with recycle bins for new residents. The Recycling and Trash Guide also contains tips to keep storm drains clean, including no dumping, proper disposal of yard wastes, fertilizer and pesticide use, car washing, and septic tank pumping. Tweets on disposal/composting of leaves were posted on 10/18/21 and 11/8/21.

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

Updated and distributed each fiscal year. Posted on social media.

Message Date(s): 10/18/21, 11/8/21

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: In-Person Exhibit - Culture House

Message Description and Distribution Method:

Salem Sound Coastwatch, a contributing partner to the Greenscapes Coalition, was a resident exhibitor at Salem Culture House, a pilot project that created a community space in Salem's Old Town Hall. At the exhibit, SSCW staff ran two hands on activities that taught visitors about their connection to their watershed. Greenscapes materials were on display and passed out.

Targeted Audience: Residents

Responsible Department/Parties: Greenscapes Coalition, Municipal Staff

Measurable Goal(s):

924 Attendees

Message Date(s): April 20 - April 23, 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Pet Waste Outreach

Message Description and Distribution Method:

Pet waste literature is distributed with dog license paperwork when issued and made available at the Town Clerk's office for distribution to residents who visit the Town Office to purchase dog licenses. The literature is posted on the Town website. Scoop the poop signage with pet bylaw information is posted at various locations throughout Town and included as an insert in printed copies of Andover's Recycling and Trash Guide. Social media posts on picking up pet waste were posted on Twitter and/or Facebook on 9/10/21, 9/24/21, 1/19/22, 3/1/22, 3/23/22, 6/7/22, 6/8/22.

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

Continuously available on website; Posted on Social Media.

Message Date(s): Continuously available; social media posts on 9/10/21, 9/24/21, 1/19/22, 3/1/22, 3/23/22, 6/7/22, 6/8/22

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Miscellaneous Tabling Events

Message Description and Distribution Method:

Events attended by Greenscapes personnel where printed materials were passed out: Middleton Earth Day, Tri-Town Spring Expo, Boxford Applefest, Topsfield Strawberry Fest, Ipswich STEAM Showcase, Beverly Earth Day, Salem Farmer's Market, Earth Week at the Peabody Essex Museum

Targeted Audience: Residents

Responsible Department/Parties: Greenscapes Coalition

Measurable Goal(s):

Unknown number of materials handed out.

Message Date(s): Various dates between September 2021 - June 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Stormwater Drain Outreach

Message Description and Distribution Method:

A message on clearing catch basins of leaves and debris was posted on Facebook and/or Twitter on 10/25/21, 10/26/21, 11/4/21, 2/3/22. The virtual and printed trash and recycling guide also contains a message to residents to "Help Keep our Storm Drains Clean".

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

Posted on social media.

Message Date(s): 10/25/21, 10/26/21, 11/4/21, 2/3/22

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Annual Water Quality Report

Message Description and Distribution Method:

The annual Water Quality Report made available in mid-June 2022 includes the following messages:
-Stormwater management tips on lawn care, recycling, auto care, pet waste
-Water conservation tips on lawn care and gardening

Targeted Audience: Residents, Businesses, institutions and commercial facilities

Responsible Department/Parties: DPW

Measurable Goal(s):

Distributed to all water customers.

Message Date(s): June 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

The annual water report is provided to all Town water customers allowing for wide distribution of various messages geared towards promoting good water quality.

BMP: Miscellaneous Social Media

Message Description and Distribution Method:

Andover shared a tweet on pesticide pollution on 9/17/21 and a post on Facebook about cigarette butts as a source of pollution and their proper disposal on 9/30/21.

Targeted Audience: Residents, businesses

Responsible Department/Parties: DPW

Measurable Goal(s):

Message Date(s): 9/17/21, 9/30/21

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

These messages address other common sources of pollution.

Add an Educational Message

MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) during this reporting period:

SWMP Plan for Download - The Town has posted the SWMP Plan on Town website.

Greenscapes provided information to school teachers to incorporate into the classroom as outlined under MCM1.

Residents are encouraged to "Pledge to Scoop the Poop" on the Town's website via a form. The pledge can be found at AndoverMA.Gov/Dogs.

Watershed Organization Involvement - Conservation Director has partnered with the Shawsheen River Watershed Association (SRWA) and the Shawsheen Greenway/Andover Trails collective, and the Merrimack River Watershed Council. Conservation Director meets with Watershed groups and discusses stormwater concerns. Volunteers from the Shawsheen River Watershed Association and other groups check outfalls into the river and work to pinpoint areas not in compliance. These areas are investigated by the Conservation staff.

Was this opportunity different than what was proposed in your NOI? Yes No

Describe any other public involvement or participation opportunities conducted during this reporting period:

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

This SSO section is NOT applicable because we DO NOT have sanitary sewer

Below, report on the number of SSOs identified in the MS4 system and removed during this reporting period.

Number of SSOs identified:

Number of SSOs removed:

MS4 System Mapping

Optional: Provide additional status information regarding your map:

All map updates are stored in an online ArcGIS platform.

Screening of Outfalls/Interconnections

If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.

- No outfalls were inspected
- The outfall screening data is attached to the email submission
- The outfall screening data can be found at the following website:

[Empty text box]

Below, report on the number of outfalls/interconnections screened during this reporting period.

Number of outfalls screened: 184

Below, report on the percent of outfalls/interconnections screened to date.

Percent of outfalls screened: 100

Optional: Provide additional information regarding your outfall/interconnection screening:

187 potential outfall locations were inspected in Year 4. Of these, outfalls were confirmed to exist at 184 locations, which were screened for dry weather flows either at the outfall or the upgradient structure. Where an outfall could not be located, the upgradient structure was inspected to determine whether the outfall existed and inspected for dry weather flow as a proxy. All known outfalls have been screened.

Catchment Investigations

If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.

- No catchment investigations were conducted
- The catchment investigation data is attached to the email submission
- The catchment investigation data can be found at the following website:

[Empty text box]

Below, report on the number of catchment investigations completed during this reporting period.

Number of catchment investigations completed this reporting period: 0

Below, report on the percent of catchments investigated to date.

Percent of total catchments investigated: 0

Optional: Provide any additional information for clarity regarding the catchment investigations below:

[Empty text box]

IDDE Progress

If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.

- No illicit discharges were found
- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following website:

[Empty text box]

Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed during this reporting period.

Number of illicit discharges identified: 0

Number of illicit discharges removed: 0

Estimated volume of sewage removed: 0 gallons/day

Below, report on the total number of illicit discharges identified and removed to date. At a minimum, report on the number of illicit discharges identified and removed since the effective date of the permit (July 1, 2018).

Total number of illicit discharges identified: 0

Total number of illicit discharges removed: 0

Optional: Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

Employee Training

Describe the frequency and type of employee training conducted during this reporting period:

IDDE and SWPPP training was performed on 6/15/2022 and included background information on stormwater pollution, MS4 requirements, illicit discharge program requirements and investigations, general good housekeeping practices, and the SWPPP for the DPW facility. Attendees included members from the Highway Department and Water and Sewer Division.

MCM4: Construction Site Stormwater Runoff Control

Below, report on the construction site plan reviews, inspections, and enforcement actions completed during this reporting period.

Number of site plan reviews completed: 15

Number of inspections completed: 30

Number of enforcement actions taken: 0

Optional: Enter any additional information relevant to construction site plan reviews, inspections, and enforcement actions:

Empty rectangular box at the top of the page.

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3): Stormwater Regulations approved 5/11/21

As-built Drawings

Below, report on the number of as-built drawings received during this reporting period.

Number of as-built drawings received: 3

Optional: Enter any additional information relevant to the submission of as-built drawings:

Empty rectangular box for optional information.

Retrofit Properties Inventory

Below, list the permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas (at least 5):

1. Andover Water Treatment Plant, 10 Geneva Road
2. Andover Fire Station West, 200 Greenwood Road
3. Andover Police and Fire, 32 North Main Street
4. Bancroft Elementary School, 15 Bancroft Road
5. South Elementary School, 55 Woburn Street
6. Poms Pond Beach, 147-163 Abbot Street
7. Municipal Parking Lot and Old Town Hall Parking Lot, 51 Park Street and 20 Main Street - These parking lots are slated for improvements in 2022 and include the incorporation of a bioretention area to treat some of the runoff from the parking lot.
8. New West Elementary School, 60 Beacon Street - The Town is building a new school on the site to replace the existing school. Stormwater treatment BMPs are incorporated into the new site design.

The full list of properties evaluated and identified for retrofit opportunities is included as an appendix to the Phosphorus Source Identification Plan.

MCM6: Good Housekeeping

Catch Basin Cleaning

Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins during this reporting period.

Number of catch basins inspected: 1,045

Number of catch basins cleaned: 1,045

Total volume or mass of material removed from all catch basins: 836 tons

Below, report on the total number of catch basins in the MS4 system.

Total number of catch basins: 4,755

If applicable:

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

These are marked as priority catch basins and slated for more frequent cleaning.

Street Sweeping

Report on street sweeping completed during this reporting period using one of the three metrics below.

Number of miles cleaned: 380

Volume of material removed: 2,377 cubic yards

Weight of material removed: [Select Units]

Stormwater Pollution Prevention Plan (SWPPP)

Below, report on the number of site inspections for facilities that require a SWPPP completed during this reporting period.

Number of site inspections completed: 4

Describe any corrective actions taken at a facility with a SWPPP:

None taken.

Additional Information

Monitoring or Study Results

Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.

Not applicable

- The results from additional reports or studies are attached to the email submission
- The results from additional reports or studies can be found at the following website(s):

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

Additional Information

Optional: Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above:

COVID-19 Impacts

Optional: If any of the above year 4 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Activities Planned for Next Reporting Period

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 5 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters

- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implement program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Enclose all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements
- Inspect all permittee owned treatment structures (excluding catch basins)
- Identify additional permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas so that the permittee maintains a minimum of 5 sites in their inventory, until such a time when the permittee has less than 5 sites remaining

Provide any additional details on activities planned for permit year 5 below:

Part V: Certification of Small MS4 Annual Report 2021

40 CFR 144.32(d) Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Title:

Signature: Date:

[Signatory may be a duly authorized representative]